

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of fabricating a semiconductor device comprising:
depositing an oxide layer, a first conducting layer for a floating gate, a dielectric layer, and a second conducting layer for a control gate in sequence on a semiconductor substrate including a device isolation layer;
forming gates by removing some part of the oxide layer, the first conducting layer, the dielectric layer, and the second conducting layer;
forming a mask pattern for a self-aligned source over the substrate including the gates;
removing the device isolation layer exposed between the gates;
performing an ion implantation process;
eliminating damage generated during the ion implantation process or the removal process of the device isolation layer by means of a chemical dry etching process;
washing the substrate from which the damage has been eliminated through a cleaning process; and
forming an insulating layer over the resulted substrate.
2. (Cancelled)
3. (Original) A method as defined by claim 1, wherein the first and the second conducting layers are formed of polysilicon.
4. (Original) A method as defined by claim 1, wherein the dielectric layer is an oxide-nitride-oxide (ONO) layer.
5. (Original) A method as defined by claim 1, wherein the device isolation layer is removed by means of dry etching.

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6. (Original) A method as defined by claim 5, wherein the dry etching is performed by applying a top power between 800W and 1500W under a pressure between 100 mTorr and 300 mTorr.

7. (Original) A method as defined by claim 5, wherein the dry etching is performed using C_4F_8 between 3 sccm and 5 sccm, CHF_3 between 2 sccm and 6 sccm, O_2 between 1 sccm and 5 sccm, and Ar between 100 sccm and 300 sccm.

8. (Cancelled).

9. (Currently Amended) A method as defined by claim 81, wherein the chemical dry etching process employs remote plasma in order to prevent ions from entering into a reaction chamber and to allow reaction only by radicals.

10. (Currently Amended) A method as defined by claim 81, wherein the chemical dry etching is an isotropic etching.

11. (Currently Amended) A method as defined by claim 81, wherein the chemical dry etching is performed by applying microwave power between 300W and 500W under a pressure between 200 mTorr and 250 mTorr.

12. (Currently Amended) A method as defined by claim 81, wherein the chemical dry etching is performed using CF_4 between 200 sccm and 280 sccm and O_2 between 40 sccm and 80 sccm.